



TWENTIETH
ANNUAL REPORT
OF THE
HEALTH OF STAFFORD.

F. MILNES BLUMER,

B.A. Dunelm, M.B. & C.M. Edin.

MEDICAL OFFICER OF HEALTH.

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STAFFORD
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Stafford,

10th April, 1894.

*TO THE CHAIRMAN AND MEMBERS OF THE
PUBLIC HEALTH COMMITTEE.*

GENTLEMEN,

I have the honour to submit herewith my
report on the health of Stafford for the year. 1893.

I am, Gentlemen,

Your obedient Servant,

F. MILNES BLUMER.



REPORT.

SECTION I.

*Vital Statistics, together with Remarks on the Mortality
during the year.*

SECTION I.

Area.—The Borough of Stafford contains an Area of Area.
1,084 acres.

Population.—Estimated to the middle of the year, the Population.
population, including the Public Institutions, is 20,170,
and is distributed as follows :—

Stafford Borough	..	..	18,580
County Asylum	..		956
Workhouse	..	..	231
H.M. Prison	..		403
			<hr/>
Total in the Institutions			1,590
			<hr/>
Total	..	..	20,170*
			<hr/>

It will be noticed that this estimate is exactly 100 short of the Census Return in 1891. It is in consequence of a decrease in the number of residents at the Public Institutions that it is brought about.

The Population gives an average density of 18·6 persons per acre.

*The **Corrected Rates** are reckoned upon a population of 18,912, obtained by deducting 1,258 from the total; that being the proportion of those in the Institutions who do not belong to the Borough.

Births.

Births.—The number of Births registered during the year was 576, of which 290 were males and 286 were females. This is equal to an annual rate of 30·45 per 1000. From the following table it will be seen that the number of births continues to diminish fairly regularly year by year; and, while the returns this year are 58 below the average of the previous ten years, they are 139 below those of the first year of the decennium. The Registrar General's Reports shew that throughout the country generally there is a diminution in the birth returns. The causal factor, no doubt, is the lower marriage-rate, and this is brought about by varying social conditions, chief among which is the degree of prosperity, local as well as national.

TABLE SHEWING NUMBER OF BIRTHS FROM 1883 TO 1893.

Year.	Males.	Females.	Total.
1883	366	349	715
1884	364	328	692
1885	343	309	652
1886	349	322	671
1887	330	338	668
1888	299	291	590
1889	311	281	592
1890	286	282	568
1891	334	264	598
1892	281	314	595
Yearly Average. 1883-92	326·3	307·8	634·1
1893	290	286	576

Deaths.

Deaths.—The total number of Deaths registered during the year was 483 (males 261, females 222). Of this number, 151 were deaths of persons who did not belong to the borough previous to their admission into one or other of the Public Institutions. The number of deaths for the borough is thus reduced to 332; and this gives a corrected death-rate of 17·54 per 1000.

Death-rate.

TABLE SHEWING THE NUMBER OF DEATHS FROM 1883 TO 1893.

Year.	Males.	Females	Total.	Non-Residents.	Residents.	Corrected Rate per 1000.
1883	260	214	474	150	324	
1884	285	245	530	144	386	
1885	274	213	487	130	357	
1886	258	208	466	131	335	17.71
1887	224	167	391	121	270	13.68
1888	252	182	434	110	324	16.97
1889	227	246	473	138	335	17.04
1890	223	174	397	124	273	14.13
1891	245	184	429	139	290	15.48
1892	252	199	451	131	320	16.84
Yearly Average 1883-92	250.0	203.2	453.2	131.8	321.4	15.98 average for 7 years.
1893	261	222	483	151	332	17.54

These returns are higher than those of the past decennial average, but the increase is chiefly noticeable among the inmates of the Public Institutions. The increase in the 'corrected' returns is due chiefly to the larger number of deaths from Zymotic Diseases, and among infants. The Quarterly Returns shew a fairly even rate throughout the year.

1st Quarter, 82	Death-rate, 17.34
2nd „ 82	„ 17.34
3rd „ 92	„ 19.45
4th „ 76	„ 16.07
Average 83	Average 17.55

The death-rate for England and Wales for the year was 19.2 per 1000.

Infantile Mortality.—There were 97 deaths of infants under a year old, which is equal to a rate of 168 per 1000 registered births. In the previous year the rate was 141, and the average for the ten years 1883-92 was 130. For the whole of England and Wales it was 159. As this year's rate is excessive, compared with the rate of previous

years, it may be well to state the causation under the heads in which the deaths were registered. Whooping Cough caused 4; Tubercular Disease, 9; Premature Birth, 16; Atrophy, 11; Convulsions, 17; Diarrhœa, 13; Disease of Digestive Organs, 7; Disease of Respiratory Organs, 10; Accident, 3; other causes, 7. In addition to the deaths from Diarrhœa and Disease of the Digestive Organs, it is probable that a large proportion of those from Atrophy and Convulsions were primarily due to disease and irritation of the Alimentary tract set up by improper feeding.

TABLE SHEWING THE CLASSIFIED CAUSES OF DEATHS IN
EACH OF THE FOUR QUARTERS.

	QUARTERS.				TOTALS
	1	2	3	4	
I.—ZYMOTIC DISEASES—					
1.—Miasmatic Diseases—					
(a) Scarlet Fever			1		1
(b) Typhoid Fever	1			1	2
(c) Membranous Croup		1			1
(d) Whooping Cough	6	3			9
(e) Influenza				5	5
2.—Diarrhoeal Diseases			13	1	14
3.—Septic Diseases					
(a) Erysipelas		2			2
(b) Pyæmia			1		1
(c) Puerperal Fever		2	2		4
4.—Venereal Diseases			1		1
II.—DIETETIC DISEASES				1	1
III.—CONSTITUTIONAL DISEASES—					
1.—Cancer	1		1	1	3
2.—Phthisis	16	16	18	12	62
3.—Tubercular Meningitis	2	1	2	2	7
4.—Other Tubercular Diseases	3	1	4	1	9
5.—Diabetes Mellitus			1		1
6.—Rheumatism		1	2		3
IV.—DEVELOPMENTAL DISEASES—					
1.—Premature Birth	3	4	3	6	16
2.—Old Age	16	12	8	14	50
V.—LOCAL DISEASES—					
1.—Diseases of Nervous System	28	27	26	23	104
2.—" Circulatory System	11	8	2	7	28
3.—" Respiratory System	16	23	20	18	77
4.—" Digestive System	5	8	14	9	36
5.—" Urinary System	1	1	2	2	6
6.—" Reproductive System ..	1	1	1	3	6
7.—" Integumentary System ..	1				1
8.—" Bones		1	1	2	4
9.—" Suprarenal Capsules	1				1
VI.—VIOLENCE—					
1.—Accident	3	4	2	2	11
2.—Suicide			1	2	3
3.—Execution			1		1
VII.—ILL-DEFINED CAUSES—					
1.—Marasmus and Atrophy	4		6	2	12
2.—Unknown	1				1
Total	120	116	133	114	483

TABLE SHEWING THE NUMBER OF DEATHS FROM THE PRINCIPAL INFECTIOUS DISEASES IN THE TEN YEARS
1883 TO 1892, AND IN THE YEAR 1893.

Diseases.	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	Average Annual Number of Deaths in the Ten years, 1883 to 1892.	Total Deaths in 1893.
Smallpox.....	8	..	..	..	..	..	..	..	..	..	.8	..
Measles	2	37	..	6	..	1	20	..	8	..	7.4	..
Scarlet Fever .....	..	5	..	1	..	1	1	3	2	..	1.3	1
Diphtheria and Membranous Group	1	..	2	..	..	2	3	..	..	..	.8	1
Whooping Cough	11	..	19	7	..	10	1	18	2	..	7.0	9
Typhoid Fever	2	4	1	1	..	..	3	..	..	8	1.9	2
Simple Continued Fever ....	..	..	..	..	..	..	2	..	..	..	.2	..
Total	24	46	22	15	2	14	30	21	12	8	19.4	13

Zymotic Death-rate (including Diarrhoea) in 1893 = 1.58 per thousand of the population.

I.—Zymotic Diseases.

Miasmatic Diseases.—There have been 13 deaths from the Common Infectious Diseases, compared with 19·4, the yearly average during the preceding decennium. Whooping Cough accounted for 9, Scarlet Fever 1, Membranous Croup 1, Typhoid Fever 2. Zymotic Diseases.

Diarrhœa caused 14 deaths, all of which, except in a child two years old, occurred in infants under a year old. Eleven of these deaths were registered in the month of July.

III.—Constitutional Diseases.

Phthisis.—It is gratifying to record that the mortality from Phthisis is lower than it has been for many years. There have been 26 deaths (corrected), compared with 37, the average during the previous seven years, which is equal to a rate of 1·37 per 1000. These favourable returns are no doubt due in a very great measure to the long continued dry weather of last year. Phthisis.

Year.	No. of Deaths.	Rate per 1000	Percentage of Total Deaths.
1886	46	2·43	11·7
1887	37	1·87	13·7
1888	37	1·93	11·4
1889	35	1·83	10·7
1890	45	2·33	16·5
1891	27	1·44	9·3
1892	31	1·63	9·7
1893	26	1·37	7·8

IV.—Developmental Diseases.

There have been 66 deaths in this class, as against 57 in the previous year; 16 being ascribed to "Premature Birth, and 50 to "Old Age." Developmental Diseases.

V.—Local Diseases.

This class of diseases has caused 263 deaths, compared with 255 in the previous year. Diseases of the Nervous System caused 104; Diseases of the Circulatory System, 28; Diseases of the Respiratory System, 77; Diseases of the Digestive System, 36; and other diseases, 18. Local Diseases.

SECTION II.

Infectious
Diseases.

SECTION II.

*Infectious Diseases.*Notification of
Infectious
Diseases.

Notification of Infectious Diseases.—The number of cases reported has been considerably larger than during any year since notification became compulsory. This is accounted for by the fact that Scarlet Fever has again been epidemic; and it will be seen from the following table that that disease contributed nearly three-fourths of the cases.

	Notified	Isolated in Hospital.	Percentage Isolated.
Smallpox	3	3	100
Scarlet Fever ..	170	112	65
Typhoid Fever ..	37	18	50
Diphtheria	1		
Simple Continued Fever	2		
Puerperal Fever ..	5		
Erysipelas	18		

Smallpox.

Smallpox was introduced into the town by two lads who were travelling as advertising agents. One of them came to my house on May 11th, with the rash well out on him. I had him at once sent into Hospital, and had his companion vaccinated and put into quarantine. Two men who slept in the same room with them on the night of the 10th, and the man and his wife who kept the house were also vaccinated. Advantage was also taken of Section 15 of the Infectious Diseases (Prevention) Act, to remove them all into another house, pending the thorough cleansing of the infected premises. The second lad developed the disease in a week's time; and one of the lodgers showed symptoms, on the thirteenth day after exposure to infection, of what proved to be a very mild case of smallpox. Both these cases were sent into hospital. Fortunately, as in 1888, we were prepared before the disease made its appearance, and could deal so promptly with the first cases that no fresh ones occurred beyond those that had been exposed to infection in the first instance.

Typhoid Fever.—There were 39 cases of Typhoid Typhoid Fever. Fever reported as against 51 in the previous year. The actual number of cases was 37, as there were two instances in which the diagnosis was not subsequently established. Except in a very few cases, as for instance in North Back Walls, I cannot record any great sanitary defects as causing so much fever. In almost every house the Corporation water had been in use for months, all the drains were disconnected from the dwellings, Rochdale tubs were in use, no suspicion could rest upon the milk supply, and, except in seven instances, there was no connection traceable between the individual cases. That there are occult causes at work in setting up Typhoid Fever, other than those which are generally recognised, is evident, but much patient investigation must be carried on before we can claim to have mastered the ætiology of Typhoid Fever.

Scarlet Fever.—There were 170 notifications of this Scarlet Fever fever compared with 47 in the previous year. As regards the incidence of the disease, the majority of the cases occurred in the latter half of the year; and all parts of the town shared in the epidemic. As I have already stated, it was mild in its character, as evidenced by the fact that there were only two deaths from Scarlet Fever, one of these occurring in the Isolation Hospital and not appearing in the tables as it is outside the borough.

Puerperal Fever.—Of the 5 cases reported, 4 proved fatal, and all of them were in the first instance attended by women. I warned these women against attending any more cases for at least a month, and in the meantime their clothing was disinfected at the depot. Puerperal Fever.

Isolation of Infectious Diseases.—Isolation in hospital was had recourse to in 133 cases, viz., Scarlet Fever, 112; Typhoid, 18; Smallpox, 3; and in addition, 2 cases of Scarlet Fever and 1 of Typhoid were treated in the Workhouse Infirmary, and 2 cases of Typhoid in the General Infirmary. In June the accommodation at the Temporary Hospital proved insufficient, and a wooden annexe had to be put up and fitted with a dozen beds, many cases in the meantime having to be treated at home which would otherwise have been isolated. The wooden hospital was soon filled, but with this extra accommodation I was able to deal with all the subsequent cases which called for isolation. With regard to the efficacy of isolation, I Isolation of Infectious Disease.

Disinfection of houses where fever has occurred has Disinfection.
been thoroughly carried out during the year. The clothing and bedding were treated in the old stove at the depot, but with the improved Washington Lyons apparatus, which we are now possessed of, disinfection will in future be much more effectually performed.

Sanitary Inspection.

I append a table giving a summary of the work done during the year in the Sanitary Inspector's Department. It states that 2112 inspections were made, and 153 formal notices were sent out to abate nuisances, all of which have been complied with. The Slaughter-houses, Bakehouses, Cowsheds, Dairies, and Milk-shops, have been regularly inspected and found, for the most part, in a satisfactory condition.

The Statistical Tables required by the Local Government Board are appended.

F. MILNES BLUMER.

SUMMARY OF SANITARY WORK DONE IN THE INSPECTOR OF
NUISANCES' DEPARTMENT DURING THE YEAR 1893, IN THE
URBAN SANITARY DISTRICT OF STAFFORD.

	Inspections and Observa- tions made.	Formal Notices by Authority.	Nuisances abated after Notice.
Dwelling-houses { Foul Conditions ..	12	12	12
and Schools. { Structural defects ..	17	17	17
Lodging-houses	10		
Dairies and Milkshops	104		
Cowsheds	104		
Bakehouses	76		
Slaughter-houses	124	4	4
Ashpits 935, Privies 276	1211		
Tub Collection 188,441			
House drainage { Defective Traps ..	52	52	52
{ Other Faults	18	18	18
Water Supply	334		
Animals improperly kept	24	24	24
Offensive Trades	2	2	2
Other Nuisances	24	24	24
TOTALS	2112	153	153

	Nos.
Seizures of Unwholesome Food	1
Samples of Water taken for Analysis	334
„ „ Condemned as unfit for use	334

Precautions against Infectious Disease.

Lots of Infected Bedding Stoved or Destroyed	300
Houses Disinfected after Infectious Disease	156
Schools ditto ditto	13
Prosecutions for not Notifying Existence of Infectious Disease	2
Convictions ditto ditto	2
Prosecutions for Exposure of Infected Persons or Things	2
Convictions ditto ditto	2

(A) TABLE OF DEATHS during the year 1893, in the Urban Sanitary District of Stafford, classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate Localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																						
	At all Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Fevers.							Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Totals.		
									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Membranous Group.	Diphtheria.														Scarlatina.	Smallpox.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Stafford Urban Sanitary District	288	95	32	12	15	71	63	Under 5 5 upwds.	.....	1	.....	1	.....	.....	2	.....	4	.....	1	.....	9	14	.....	.....	4 16	19 32	..... 13	5 2	74 91	127 161
County Asylum	112	.....	.....	.....	12	82	18	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29	13	9	.....	61	112	
Workhouse	33	2	.....	.....	.....	8	23	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	.....	25	2 31	
Infirmary	43	.....	2	4	5	25	7	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	7	9	5	2 4	15	2 41	
H.M. Prison.....	7	.....	.....	1	1	4	1	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	1	1	1	7	..
Totals	483	97	34	17	33	190	112	Under 5 5 upwds.	.....	1	.....	1	.....	.....	2	.....	4	.....	2	.....	9	14	.....	.....	4 58	19 58	..... 28	7 7	76 193	131 352

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the district among persons belonging thereto.	.....	.....	.....	.....	.....	.....	.....	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deaths occurring within the district among persons not belonging thereto.	151	1	...	3	14	105	28	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	36	18	14	4	1	77	150

(B) Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1893, in the Urban Sanitary District of Stafford, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES. (a)	POPULATION AT ALL AGES.		Registered Births. (d)	NEW CASES OF SICKNESS IN EACH LOCALITY COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													Number of such cases Removed from their Homes in the several Localities for Treat- ment in Isolation Hospital.			
	Census, 1891. (b)	Estimated to middle of 1893. (c)			Smallpox. 1	Scarlatina. 2	Diphtheria. 3	Membranous Croup. 4	Fevers.					Cholera. 10	Erysipelas. 11			Smallpox. 1	Scarlatina. 2	Enteric or Typhoid. 3
									Typhus. 5	Enteric or Typhoid. 6	Continued. 7	Relapsing. 8	Puerperal. 9							
	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3
Stafford Urban Sanitary District	18545	18580	576	.....	3	166	1	.....	.....	34	2	.....	5	.....	17	.....	..	3	110	18
County Asylum	982	956	.....	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Workhouse.	254	231	.....	Under 5 5 upwds.	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Infirmary	Included in Borough.	.....	.....	Under 5 5 upwds.	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
H.M. Prison	489	403	.....	Under 5 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	20270	20170	576	.....	3	170	1	.....	.....	37	2	.....	5	.....	18	.....	..	3	112	18

